Lake Champlain is listed on the NY Department of Environmental Conservation's Impaired Waterbodies List due to an increased amount of pollution within its water. The major contributor of this pollution is stormwater runoff. Stormwater runoff is water from rain or melting snow that does not soak into the ground. Instead, it runs over impervious surfaces, for example roofs, driveways, patios and sidewalks.

The City of Plattsburgh is committed to helping reduce stormwater pollution from entering into the Saranac River and Lake Champlain, as well as reducing the amount of flooding on its streets. The City has taken many steps to improve stormwater conveyance and retention, and is now asking the homeowners within the City to join them. Together, we can create a sustainable City that is a great place to live, work and visit.

# City of Plattsburgh

INTRODUCING HOMEOWNERS TO GREEN INFRASTRUCTURE

"Informing the public about the condition of the Lake is critical in restoring and protecting water quality and the diverse natural and cultural resources of the Basin. By enhancing the public's understanding and appreciation of water quality, fisheries, wetlands, wildlife, recreation, and cultural heritage, it will foster a sense of personal responsibility that leads to improved stewardship of the Basin's resources."

> Lake Champlain Basin Program State of the Lake Report

As the stormwater moves across impervious surfaces it picks up pollutants such as gas, oil, litter, fertilizers and pet waste. The stormwater then runs into the storm drains, which discharge to Lake Champlain and the Saranac River. These pollutants can have a negative effect on the Lake by causing excess algae and plant growth, which harms fish populations and the quality of the Lake's water for swimming and drinking.

But you can help! By installing a small green infrastructure practice on your property!



## For more information, please contact

City of Plattsburgh
Engineering and Planning Department 41 City Hall Place Plattsburgh, NY 12901

**Monday through Friday** 8:00 am to 4:00 pm Phone (518) 563-7730















# How Can I Help with Green Infrastructure

By utilizing green infrastructure practices throughout your yard and property you can help the City reduce the amount of stormwater in the streets and help protect the water quality of the Saranac River and Lake Champlain. It can be as simple as planting a garden, creating a new patio, switching your fertilizer or collecting runoff from your roof.

#### **Rain Gardens**

Rain gardens are landscaped depressions that are designed to capture and filter stormwater runoff from impervious surfaces. Planting a rain garden in your yard will decrease the amount of pollution entering into the Saranac and Lake Champlain. When planting your rain garden remember to keep it at least 10 feet from any foundations and direct any downspouts towards the garden. Naturally sloping or depressed areas in your yard are a good place to start. A typical homeowner rain garden is 100 - 300 sq. ft. large and 4 - 8 inches deep. Make sure to use native plants when planting your garden, as they require less maintenance than non-natives.

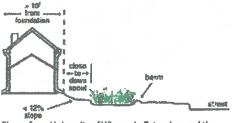


Figure from University of Wisconsin Extension and the Wisconsin Department of Natural Resources.

#### **Permeable Pavers**

Permeable pavers allow water to infiltrate into the ground, unlike impermeable surfaces such as asphalt and pavement. By investing in permeable surfaces, stormwater runoff is reduced considerably, which aids in reduced street flooding and pollutants entering into the Saranac River and Lake Champlain. There are several attractive choices for permeable surfaces that can include grass or stone to aid in infiltration.



### **Phosphorus Free Fertilizer**

Phosphorus is an essential nutrient for plant growth, but too much in a lake can cause excess algae to grow and blanket the water with a green goo. What's more, the majority of lawns already contain the necessary amount of phosphorus for grass to grow. It's because of this that NYS enacted a law in 2012 requires phosphorus-free fertilizer be used on all lawns unless you are establishing a new lawn or a soil test shows that vour lawn doesn't have enough phosphorus. In addition, you may not apply fertilizer within 20 feet of a waterbody unless there is a 10 food plant buffer. You may also not apply fertilizer from December 1 - April 1. An additional good practice is to use a spreader guard. For more information on the Dishwater Detergent and Nutrient Runoff Law, visit www.dec.ny.gov/ chemical/67239.html.

infrastructure
practices mimic
nature to help retain
and infiltrate stormwater
runoff, instead of
allowing it to enter
into local surface
waters.

#### **Rain Barrels**

Rain barrels can be connected to your home's downspout to catch runoff from your roof and store it instead of letting it enter into the storm drains. You can use the water in the rain barrel to water your landscaping, which will decrease your use of tap or well water.

